What is claimed is:

1. A high-speed searching circuit for use in a CDMA cellular system having a plurality of mobile stations and a plurality of base stations, which comprises:

means for generating a plurality of short codes which are orthogonal with each other;

means for receiving data containing one of said plurality of short codes and a long code inherent to one of said plurality of base stations;

correlators for correlating the received data with said plurality of short codes to detect said one of said plurality of short codes contained in said received data; and

means for screening candidates for the received long code on the basis of the detected short code.

2. A mobile station for use in a CDMA cellular system having a plurality of mobile stations and a plurality of base stations, which comprises:

means for generating a plurality of short codes which are orthogonal with each other;

means for receiving data containing one of said plurality of short codes and a long code inherent to one of said plurality of base stations;

correlators for correlating the received data with said plurality of short codes to detect said one of said plurality of short codes contained in said received data; and

means for screening candidates for the received long code on the basis of the detected short code.

3. A base station for use in a CDMA cellular system having a plurality of mobile stations and a plurality of base stations, which comprises:

means for generating a plurality of short codes which are orthogonal with each other; and

means for transmitting, to said plurality of mobile stations, data containing one of said plurality of short codes and a long code inherent to the base station.

4. A CDMA cellular system having a plurality of mobile stations and a plurality of base stations,

each of the base stations comprising:

means for transmitting, to said plurality of mobile stations, data containing one of a plurality of short codes which are orthogonal with each other and a long code inherent to the base station; and

each of the mobile stations comprising:

means for generating a plurality of short codes which are orthogonal with each other;

means for receiving said data containing one of said plurality of short codes and the long code;

correlators for correlating the received data with said plurality of short codes to detect said one of said plurality of short codes contained in said received data; and

means for screening candidates for the received long code on the basis of the detected short code.

5. A method of searching codes used in a CDMA cellular system having a plurality of mobile stations and a plurality of base stations, which comprises the steps of:

generating a plurality of short codes which are orthogonal with each other;

receiving data containing one of said plurality of short codes and a long code inherent to one of said plurality of base stations;

correlating the received data with said plurality of short codes to detect said one of said plurality of short codes contained in said received data; and

screening candidates for the received long code on the basis of the detected short code.

6. The high-speed searching circuit according to *claim* 1, wherein:

each of said plurality of short codes includes a plural ("M") symbols which are spread spectrum symbols;

said M symbols have combinations of the polarities corresponding to said short codes; and

said correlators have despreading means to generate M symbols data.

7. The high-speed searching circuit according to claim 6, wherein each of said correlators further comprises adders fro adding said M symbols data in an in-phase component and a quadrature component; and

an orthogonal vector which is received on the basis of the sum thereof and the maximum value of the amplitude component is specified.

8. The high-speed searching circuit according to claim 6, wherein each of said correlators further comprises an M-tap ring buffer for adding said M symbols data in an in-plane component and a quadrature component in accordance with the polarities corresponding to said short codes, wherein:

the content of said M -tap ring buffer is renewed at a symbol rate; and

the addition result is used to specify an orthogonal vector.

9. The high-speed searching circuit according to claim 6, wherein a Barker sequence is used to specify the frame position of the M symbols.

10. The high-speed searching circuit according to claim 1, wherein redundancy is provided to codes which are formed by "L"-time repetition of an orthogonal vector to provide a function of restoring a portion which cannot be detected.

11. The high-speed searching circuit according to claim 6, wherein, in the coherent integration of the M symbols, a sequence which is weighted and polarized on the assumption of the carrier frequency is prepared, and the maximum one is selected on the basis of the correlation thereof, thereby supporting coherent integration having frequency deviation.

12. The mobile station according to claim 2, wherein:

each of said plurality of short codes includes a plural ("M") symbols which are spread spectrum symbols;

said M symbols have combinations of the polarities corresponding to said short codes; and

said correlators have despreading means to generate M symbols data.

13. The mobile station according to claim 12, wherein each of said correlators further comprises adders fro adding said M symbols data in an in-phase component and a quadrature component; and

an orthogonal vector which is received on the basis of the sum thereof and the maximum value of the amplitude component is specified.

14. The mobile station according to claim 12, wherein each of said correlators further comprises an M-tap ring buffer for adding said M symbols data in an in-plane component and a quadrature component in accordance with the polarities corresponding to said short codes, wherein:

the content of said M -tap ring buffer is renewed at a symbol rate; and

the addition result is used to specify an orthogonal vector.